

a little less than 8.86", as is generally admitted to-day—a difference of a trifling fraction of a second being in reality equivalent to millions of miles.

EDMUND HALLEY was the first to surmise the scientific importance of the passage of the gentle evening star between our planet and the sun. The phenomenon, unfortunately, was not to occur during his lifetime. It took place in June, 1761, nineteen years after his death, but he emphatically recommended it to future astronomers. "May heaven," he said "favor their observations with the fairest weather, and when they shall have accomplished their object, and ascertained our distance to the sun, may they remember that it is an Englishman who first had this happy idea."

Great pains were taken to carry out the idea successfully, but circumstances were not so favorable as HALLEY had wished them to be. One of the observers met with even more than ordinary mishaps and disappointments, and his story is worth recording, though it is a hundred years old.

LE GENTIL DE LA GALAISIERE had been commissioned to observe the transit at Pondicherry. He embarked in the month of March, 1760, and landed at the Isle of France in July following. But in the meantime war had broken out between France and England, and he had to wait five months before a French frigate dared to venture on the Indian Ocean. When he arrived in sight of Pondicherry, on the 24th of May, 1761, he found the town in the possession of the English, and on the 6th of June, when the transit took place, he was still at sea. He saw the sun shining in a blue and cloudless sky, but, on account of the vessel's motion, it was impossible to make use of the heavy telescopes he had on board. LE GENTIL took at once a heroic resolution: "As I am here," he said, "I will stay." And he remained eight years on the Coast of Coromandel, waiting for the transit of 1769.

He improved his time studying the Indian climate, sea currents and native astronomy, and determining geographical positions. At last the great day arrived. The season had been splendid; LE GENTIL was full of confidence and courage. The transit was to take place on the 4th of June, from 3 to 7 o'clock in the morning. The whole day of the 3d was fine and favorable. At 10 o'clock, after having arranged his instruments, LE GENTIL retired. At 2 o'clock he awoke, and thought he heard the wind blowing from the south-east. This was a good omen, for "I knew," he says, "that the south-eastern wind sweeps the coast, and always brings fair weather. But, feeling anxious, I got up, and I saw, with amazement, all the sky overcast, and lightning in the north. I gave up hope at once, and threw myself on my bed without being able to close my eyes." At 5:30 the tempest began to rage. The air was darkened with whirlwinds of dust. Toward 6 the wind fell, but the clouds remained. By 7, when the planet was to emerge, a dim white spot marked the place of the sun, but nothing could be seen with the telescope. Little by little the winds changed, the clouds scattered, and the sun shone brightly for the rest of the day. On the 5th the sun rose in all its beauty and the day again was bright. So were the succeeding days. It seems as if the morning of the 4th had been marred on purpose, and the pen dropped several times out of the foiled astronomer's hand when he sat down to chronicle the fate of his operation.

On his return from the coast of Coromandel he found that the Academy of Science, receiving no tidings from him, had considered him dead and had filled his place. One of his relations had used the opportunity to appropriate his estate, and LE GENTIL died before he succeeded in wresting it from him. There are not many cases on record of so much toil and perseverance being rewarded with so much disappointment and grief, and we hope that none of our astronomers will have set out under so unpropitious a star as did poor LE GENTIL DE LA GALAISIERE.

# AN ASTRONOMER'S EVIL STAR.

Astronomers are looking anxiously forward to the transit of Venus, which is to occur on the 9th of December. Scientific corps of observation have been appointed and fitted out; stations have been selected for them, those most available being in the South Seas, in Japan, China, and Australia. Every provision has been made, as far as human means go, to secure a satisfactory result; and it is more than probable that, aided by the improved appliances of modern science, those who are engaged in the task will definitely settle the question whether the sun's parallax is a little more or